IN THE CLAIMS

- 1. (Original) A CMP abrasive comprising:
- a ceria slurry; and
- a chemical additive having two or more functional groups by mixing and synthesizing a polymeric molecule and a monomer.
- 2. (Original) A CMP abrasive as defined in claim 1, wherein said ceria slurry comprises ceria powder, water and negative-ion-based polymeric compound and conforms to a Newtonian viscosity behavior.
- 3. (Original) A CMP abrasive as defined in claim 2, wherein said negative-ion-based polymeric compound is selected from the group consisting of polymethacrylic acid, ammonium polymethacrylate, polycarboxylate and carboxyle-acryl polymer.
- 4. (Currently Amended) A CMP abrasive as defined in claim 1-or 2, wherein in said chemical additive, said polymeric molecule is polyacrylic acid (PAA), and said monomer is selected from the group consisting of acrylamide, methacrylamide and ethylmethacrylamide.
- 5. (Original) A CMP abrasive as defined in claim 4, wherein mixing ratio of said slurry to said chemical additive is 1:1.
- 6. (Currently Amended) A CMP abrasive as defined in claim 1-or 2, wherein in said chemical additive, said polymeric molecule is polyacrylic acid (PAA), and said monomer is vinylpyridine or vinylpyrrolidone.
- 7. (Original) A CMP abrasive as defined in claim 6, wherein mixing ratio of said slurry to said chemical additive is 1:1.

- 8. (Currently Amended) A CMP abrasive as defined in claim 1-or 2, wherein in said chemical additive, said polymeric molecule is alkyl methacrylate, and said monomer is selected from the group consisting of acrylamide, methacrylamide and ethylmethacrylamide.
- 9. (Original) A CMP abrasive as defined in claim 8, wherein mixing ratio of said slurry to said chemical additive is 1:1.
- 10. (Currently Amended) A CMP abrasive as defined in claim 1-or 2, wherein in said chemical additive, said polymeric molecule is alkyl methacrylate, and said monomer is vinylpyridine or vinylpyrrolidone.
- 11. (Original) A CMP abrasive as defined in claim 10, wherein mixing ratio of said slurry to said chemical additive is 1:1.
- 12. (Original) A method for manufacturing CMP abrasive comprising steps of:
 providing a ceria slurry;

manufacturing a chemical additive having two or more functional groups by mixing and synthesizing a polymeric molecule and a monomer in a reactor; and mixing said slurry and said chemical additive.

13. (Original) A method for manufacturing CMP abrasive as defined in claim 12, wherein said step of providing a ceria slurry comprising steps of:

manufacturing ceria by solid-phase synthesis;

mixing said ceria with water;

milling said mixture with a high energy attrition mill;

dispersing said milled resultant with a high pressure dispersion apparatus; and dispersion stabilizing said dispersed resultant by adding negative-ion-based polymeric compound.

- 14. (Original) A method for manufacturing CMP abrasive as defined in claim 13, wherein said negative-ion-based polymeric compound is selected from the group consisting of polymethacrylic acid, ammonium polymethacrylate, polycarboxylate, and carboxyle-acryl polymer.
- 15. (Currently Amended) A method for manufacturing CMP abrasive as defined in claim 13-or-14, wherein said negative-ion-based polymeric compound of $0.0001 \sim 10\%$ by weight is added.
- 16. (Original) A method for manufacturing CMP abrasive as defined in claim 13, after said step of dispersion stabilizing, further comprising a step of removing large particles with a filter.
- 17. (Currently Amended) A method for manufacturing CMP abrasive as defined in claim 12-or-13, wherein the molecular weight of the polymeric molecule is $2,000 \sim 1,000,000$.
- 18. (Currently Amended) A method for manufacturing CMP abrasive as defined in claim 12-or 13, wherein said step of manufacturing the chemical additive further comprises a step of adding further solvent to the synthesized chemical additive.
- 19. (Original) A method for manufacturing CMP abrasive as defined in claim 18, wherein said step of adding further solvent causes the synthesized chemical additive to be $0.03 \sim 10\%$ by weight.
- 20. (Currently Amended) A method for manufacturing CMP abrasive as defined in claim 12-or 13, wherein in said chemical additive, said polymeric molecule is polyacrylic acid (PAA) or alkyl methacrylate, and said monomer is selected from the group consisting of acrylamide, methacrylamide, ethyl-methacrylamide, vinylpyridine, and vinylpyrrolidone.

21. (Original) A method for manufacturing CMP abrasive as defined in claim	
20, wherein the mixing ratio of said slurry to said chemical additive is 1:1.	
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